

REMARKS

Applicants have cancelled claim 40 without prejudice or disclaimer. Applicants have amended claims 1 to 11, 13 to 30, 31 to 39, 41 and 43 to 53. Thus, claims 1 to 39 and 41 to 54 are currently pending.

35 U.S.C. §112, Second Paragraph Rejections

Claims 1 to 42, 46 and 50 to 54 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Specifically, the recitations “control melt-process” in claims 1, 11, 46, 51 and 52; and “control surface covering” in claims 30 and 52 were deemed vague and indefinite. The structural relation between the layers in claims 1 to 10, 19, 39 and 47 to 51 was deemed to be vague, indefinite and confusing.

The phrase “control melt-processed” is defined in the paragraph beginning at line 7 on page 7 of the Specification. The phrase “control surface covering” is defined in the paragraph beginning at line 10 on page 8 of the Specification. Further, claims 1, 11, 22, 30, 46, 50, 51 and 52 have been amended to more clearly specify the meaning of the phrases.

Claims 1, 8, 19, 39 and 47 have been amended to define the structural relationship between the layers. Therefore, it is respectfully submitted that the rejections pursuant to 35 U.S.C. 112 have be overcome and should be withdrawn.

35 U.S.C § 103 Rejections

Claims 1 to 54 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants’ admission either taken individually, or in view of U.S. Patent No.

3,969,469 to Love. The Examiner is correct that Applicants admit that multi-layered sheets have been widely used as resilient surface coverings, especially to cover floors and that some multi-layer resilient surface coverings include melt-processed base layers formed of resins composed of PVC homopolymer, which provide strength and durability to the surface covering sheets. However, independent claims 1, 11, 22, 30 and 52 have been amended to require the melt-processed layer to comprise a strength-imparting non-PVC polymer. Independent claims 43 and 47 require the melt-processed layer to include a blend of PVC and nitrile rubber.

Applicants do not admit that it would be obvious to substitute of resin blend for the PVC homopolymer of the admitted prior art. Therefore, the Examiner must find some suggestion in the prior art to combine the admitted prior art with a reference suggesting the proposed modification.

The Examiner looks to Love for such a suggestion. However, Love is directed to blends of PVC, styrene-butadiene-alkyl methacrylate polymer or a partially cross-linked alkyl methacrylate polymer, and styrene-acrylonitrile copolymer or styrene-acrylonitrile-alkyl methacrylate terpolymer. See column 1, lines 59 to 68, for example. It is not inherent that the Love blends have the improved toughness required by present claims 1, 11, 22, 46, 50 and 52. See Table III on page 16 of the present Specification for evidence that not all blends have the desired toughness.

Further, independent claims 1, 11, 22, 30 and 52 have been amended to require the melt-processed layer to comprise about 55% to about 80% by weight filler. Support for this amend is found at page 5, lines 19 and 20, and page 6, lines 3 to 5, for example. While Examples 1 and 2 of Love disclose 6 parts by weight of titanium dioxide, Love

does not teach or suggest the filled resin blend of the present 1, 11, 22, 30 and 52. It is not obvious that the claimed highly filled melt-processed layer would have the required toughness or impact resistance even if the blend of Love were substituted for the PVC homopolymer of the prior art. Those of ordinary skill in the art believe that the high quantity of filler will dilute the affects of the change in binder. Therefore, these claims are allowable for this reason as well.

Claims 3,14, 24, 33, 44 and 48 specifically limit the melt-processed layer about 10% to about 45% by weight of the polymeric blend. This limitation is not taught or suggested by Love.

Claim 30 has been amended to require a surface covering comprising a foam layer interposed between a wear layer and the melt-processed layer. Claim 47 has been amended so that a foam layer interposed between the wear layer and the melt-processed layer is clearly required. The surface covering of claim 30 and claim 51, which depends from claim 47, have at least a 30% greater impact resistance than the control surface covering in which the melt-processed layer is PVC homopolymer. There is no teaching in Love of a wear layer or a foam layer. Further, it is not obvious that increasing the toughness of the melt-processed layer would improve the impact resistance of a wear layer overlying a foam layer that overlies the melt-processed layer. Therefore, claims 30 and 51 should be allowed.

Claims 43, 47 and 53 require the melt-processed layer to include a blend of PVC and nitrile rubber. Love does not teach nor suggest such a blend. Therefore, claims 43, 47 and 53 are allowable over the combination of the admitted prior art and Love.

Applicants submit that all the claims are believed to be in a condition for allowance. Reconsideration is respectfully requested.

Respectfully submitted,

7/17/03
Date

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